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| 10/039,879 | 12/31/2001 | Don J. Hodapp JR. | 00-101-NSC | 8349 |

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EXAMINER

DALEY, CHRISTOPHER ANTHONY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2111

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/039,879 | | HODAPP, DON J. | |
| | Examiner | | Art Unit | |
| | Christopher A Daley | | 2111 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 26 are examined.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1 – 5, 10- 18, and 23 - 26 are rejected under 35 U.S.C. 102(e) as being anticipated by McCarty (US6356944).
4. As to claims 1 and 14, McCarty discloses a method and apparatus in a data processing system (492, Figure 3C) for transferring data from a plurality of host data links (N_Ports) to at least one local data link (440), the method and apparatus comprising the steps of:

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Initializing a data bridge (McCarty teaches of a data bridge (430 of Figure 3C), where the bridge is responsible for routing data, error detection and correction, and flow control, Col. 8, lines 4 – 7. The flow control is a component of the initialization process where service parameters and a common operating system are established. (Col. 8, lines line – Col. 9, line 3), where the data bridge (430) is functionally connected on a first end to the plurality of host data links (435) and on a second end to the at least one local data link (436); determining if a first data link (any N_Port) within the plurality of host data links and a second data link (440) within the at least one local data link initiate a login parameter; (McCarty teaches that the data link devices must login to each other before commencing a transaction (Col. 8, lines 57 – 64).

And automatically transfer the data from a source data link (any N_Port) within the first plurality of data links (N_Ports) to a target data link (440) within the at least one local data link based on the login parameter, wherein the data transferred from the source data link is stored in a memory buffer device, and wherein the memory buffer device is connected to the data bridge. (McCarty teaches of transferring data from an initiator 410 to a target 415 in figure 4A. When the target is ready to accept data, a signal is sent back to the initiator, (step 425) that initiates the data transfer to the target. It is inherent that the initiator comprises of a memory buffer to afford data transfer. This buffer would be connected to the data bridge, which couples the initiator and the target, Col. 10, lines 6 - 24).

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As to claims 2 and 15, McCarty discloses a method and apparatus, where the data transferred from the source link is stored in a memory buffer device is connected to the data bridge via a memory buffer controller McCarty teaches of transferring data from an initiator 410 to a target 415 in figure 4A. When the target is ready to accept data, a signal is sent back to the initiator, (step 425) that initiates the data transfer to the target. It is inherent that the initiator comprises of a memory buffer to afford data transfer. This buffer would be connected to the data bridge, which couples the initiator and the target, Col. 10, lines 6 - 24).

5. As to claims 3 and 16, McCarty discloses a method and apparatus, where the data bridge is a data link concentrator (McCarty teaches of a Fabric that comprises the functions of a data bridge of routing, error detection, and flow control, COL. 8, lines 1 – 9, Figure 3C).

6. As to claims 4, and 17, McCarty discloses a method and apparatus, where initializing the data bridge includes resetting the data bridge (McCarty teaches of a start/reset process and apparatus in figure 7. It would have been obvious to one of ordinary skill in the art at the time of the invention to know that the bridge data is cleared as a new routing configuration is being arranged).

7. As to claims 5 and 18, McCarty discloses a method and apparatus, where the data bridge is reset, the plurality of host data links functionally connected to the data bridge and the at least one local data link functionally connected to the data bridge are

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forced offline by the data bridge (McCarty teaches that on reset, loop initialization is the next step, figure 7. Since new addresses need to be assigned, it is obvious to one of ordinary skill in the art at the time of the invention the links would be off line as they are not logged in, COL. 9, lines 5 – 30).

8. As to claims 10 and 23, McCarty discloses a method and apparatus, where the login parameter includes a fibre channel fabric login parameter and a fibre channel port login parameter (492 of Figure 3C displays a fibre channel configuration that shows a fabric 430 with fabric port (F_Port 436) and node ports (N_Ports), such as N_Port 440. Communication paths can be established between N_Port 440 and Fabric 430 through path 439, Col. 8, lines 10 - 19).

9. As to claims 11 and 24, McCarty discloses a method and apparatus, where the fibre channel login parameter includes buffer credits (During initialization, service parameters are established which include buffer credits, Col. 8, line 64 – Col. 9 line 4).

10. As to claims 12 and 25, McCarty discloses a method and apparatus, where the fibre channel port parameter includes a port identification (McCarty teaches the controller node keeps track of the Fibre channel node/fabric specific identity, Col. 9, lines 9 - 14).

11. As to claims 13 and 26, McCarty discloses a method and apparatus that automatically transfers the data from a source data link within the plurality of host data links to a buffer device if the data bridge is in a lockout mode (McCarty teaches that there is a buffer to buffer credit. This is a flow control mechanism that can be used to store frames when a lock out mode is encountered, COL. 9. Lines 1 - 8).

Claim Rejections - 35 USC § 103

Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty in view of Jibbe (US6367033).

12. As to claims 6 and 19, McCarty does not disclose explicitly a method or apparatus to monitoring a signal from the first data link within a plurality of host data links and a signal from the second data link functionally connected to a data bridge. (However, Jibbe teaches of a method and apparatus, to monitor a signal from first data link 105 (host-side monitor 125) within the plurality of host data links (host#1 – host #n) and a signal from the second data link (115) within at least one local data link functionally connected to the data bridge (110), COL. 6, lines 1 – 11, figure 1; determining whether an initiating sequence signal is received by the first data link and the second data link ;
(Jibbe teaches of executing a program to establish data flow between first data link 105, and second data link 115 through an active data bridge 110. It would be obvious

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to one of ordinary skill in the art at the time of the invention that data bridge is active via host-side monitor 125, COL. 6, lines 1 – 11)

and establish a data bridge (4) active state if the initiating sequence signal is received by the first data link and the second data link (Jibbe teaches of executing one or more host programs to establish an active data bridge(110) between first data link 105 and second data link 115. It would have been obvious to one of ordinary skill in the art at the time of the invention that these programs would appropriately configure the system. It would have been obvious at the time of the invention for one of ordinary skill in the art to combine the teaching of McCarty and Jibbe as Jibbe provides a means of testing and debugging a fibre channel system thus improving system ramp up time, COL. 1, lines 13 – 29).

13. Claims 7 – 9, 20 - 22 rejected under 35 U.S.C. 103(a) as being unpatentable over McCarty in view of Jibbe and in further view of Stoevhasse (US5805924).

14. As to claims 7 and 20, McCarty and Jibbe do not explicitly disclose a method or apparatus that terminates data transfer between fibre channel sources. (However, Stoevhasse discloses a method and apparatus that terminates data transfer from the source data link (12) within the plurality of host data links (12,14,28) to the target data link (10) within the at least one local data link if the data bridge (4) is in an offline state (Stoevhasse teaches that if either fabric element involved should become inactive, the impacted devices or switch (such as data bridge 4) is taken off- line, and reinitialized

Col. 8, lines 24 - 29. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McCarty and Jibbe with the teachings of Stoevhase because McCarty supports a variety of rearrangements, modifications, and substitutions (Col. 12, lines 62 - 66). The user is provided with a means of system controllability).

15. As to claims 8 and 21, McCarty and Jibbe do not explicitly disclose a method or apparatus that terminates data transfer if one of the links is inactive. (However, Stoevhase discloses a method and apparatus for monitoring the plurality of host data links (12,14,28) and the at least one local data link (10) functionally connected to the data bridge (4); and terminating data transfer from the source data link (12) to the target data link if the plurality of host data links (10) or the at least one local data link does not remain in an active state. (Stoevhase teaches that if any fabric element involved should become inactive, the impacted devices or switch (such as data bridge 4) is taken off-line, and reinitialized Col. 8, lines 24 - 29. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McCarty with the teachings of Stoevhase because McCarty supports a variety of rearrangements, modifications, and substitutions (Col. 12, lines 62 - 66). The user is provided with a means of system observability and controllability).

16. As to claims 9 and 22, McCarty and Jibbe do not explicitly disclose a method or apparatus that resets the data bridge should the involved data links be in an off-line state. (However, Stoevhase discloses a method and apparatus, where if the plurality of

host data links (12,14,28) and the at least one local data link (10) complete an offline state protocol, the data bridge (4) is reset. Stoevhasse teaches that if any fabric element involved should become inactive, the impacted devices or switch (such as data bridge 4) is taken off- line, and reinitialized Col. 8, lines 24 - 29). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McCarty with the teachings of Stoevhasse because McCarty supports a variety of rearrangements, modifications, and substitutions (Col. 12, lines 62 - 66). The user is provided with a means of system controllability).

Response to Arguments

17. Applicant's arguments with respect to claims 1 and 14 have been considered but are moot in view of the new ground(s) of rejection. Applicant amended said claims to include wherein the data transferred from the source link is stored in a memory buffer device, and wherein the memory buffer device is connected to the data bridge.

Reference Jibbe (US6367033), teaches of a fibre channel system 100 in figure 1, comprising computer 105 serving as source data link port, which comprises a memory device. Data is transferred from said first data link to target data link disk array controller 115 of figure 1 through data bridge 110.

18. Regarding the arguments submitted on claim 5, McCarty teaching of Data Bridge reset, the teaching has been updated to reflect a more precise understanding. McCarty teaches that on reset, loop initialization is the next step, figure 7. Since new addresses need to be assigned, it is obvious to one of ordinary skill in the art at the time of the invention the links would be off-line as they are not logged in.

19. Regarding the argument submitted on claim 13, regarding automatically transferring the data from a source data link within the plurality of host data links to a buffer device if the data bridge is in a lockout mode, Stoevhase teaches that if a device connected to a fabric element becomes inactive as the bridge would be in said configuration, the system manager has the option of altering the service parameters of fabric element. In addition, McCarty teaches of several topological configuration as illustrated in figures 3a –3C. Should the bridge be in a lockout mode, a different configuration such as an arbitrated loop, figure 3b that would allow automatically transfer of data from a source such as 420C to a destination such as 420D.

20. Regarding the argument submitted on claim 6, regarding establishing a data bridge active state if the initiating sequence signal is received by the first data link and the second data link, the new reference Jibbe teaches of a fibre channel system comprising an active data bridge 110 with first data link 105, and the second data link 115. Jibbe teaches of executing one or more host programs to establish an active data bridge(110) between first data link 105 and second data link 115. It would have been obvious to one of ordinary skill in the art at the time of the invention that these programs would appropriately configure the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571 272 3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAD

1/25/2005
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TIM VO
PRIMARY EXAMINER